

Title (en)

CHIRP LINEARITY DETECTOR FOR RADAR

Title (de)

CHIRP-LINEARITÄTSDETEKTOR FÜR RADAR

Title (fr)

DÉTECTEUR DE LINÉARITÉ DE COMPRESSION D'IMPULSIONS POUR RADAR

Publication

EP 3531162 B1 20240117 (EN)

Application

EP 18305208 A 20180227

Priority

EP 18305208 A 20180227

Abstract (en)

[origin: EP3531162A1] A chirp linearity detector, integrated circuit, and method are provided. The chirp linearity detector comprises a signal source frequency sampling circuit and a frequency sweep linearity measuring circuit. The signal source frequency sampling circuit comprises a programmable-divisor frequency divider circuit for receiving a signal source output signal from a signal source and for providing a frequency divided output signal, a first low pass filter circuit for receiving the frequency divided output signal, for reducing harmonic mixing, and for providing a mixer input signal, a mixer circuit for receiving the mixer input signal, for mixing the mixer input signal with a local oscillator signal, and for providing a mixer output signal, a second low pass filter circuit for performing anti-aliasing filtering and for providing an analog-to-digital converter (ADC) input signal, and an ADC circuit for digitizing the ADC input signal and for providing a digital output signal.

IPC 8 full level

G01S 7/03 (2006.01); **G01S 7/35** (2006.01); **G01S 7/40** (2006.01); **G01S 13/34** (2006.01); **G01S 13/931** (2020.01); **H03L 7/093** (2006.01); **H03L 7/197** (2006.01); **G01S 13/28** (2006.01)

CPC (source: CN EP US)

G01S 7/032 (2013.01 - EP); **G01S 7/35** (2013.01 - EP US); **G01S 7/40** (2013.01 - CN); **G01S 7/4008** (2013.01 - EP); **G01S 7/4017** (2013.01 - EP US); **G01S 7/4056** (2013.01 - US); **G01S 7/5203** (2013.01 - US); **G01S 13/343** (2013.01 - EP); **G01S 13/931** (2013.01 - EP); **H03L 7/0805** (2013.01 - US); **H03L 7/093** (2013.01 - US); **H03L 7/1072** (2013.01 - US); **H03L 7/12** (2013.01 - US); **H03L 7/197** (2013.01 - EP); **G01S 13/282** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3531162 A1 20190828; **EP 3531162 B1 20240117**; CN 110196413 A 20190903; US 11143746 B2 20211012; US 2020057140 A1 20200220; US 2021302535 A9 20210930

DOCDB simple family (application)

EP 18305208 A 20180227; CN 201910130818 A 20190222; US 201815999181 A 20180817